

Conceptual Discussion of Business Plan Metrics

Revised July 13, 2016

Introduction

This document was drafted by PG&E to facilitate a discussion around the topic of “metrics” in an effort to better align what PG&E delivers with the CPUC’s expectations. While there has been some guidance to date about metrics, there are lots of additional areas where Program Administrators (PAs) will need clarification before being able to provide the CPUC with final metrics. This document is intended to help the PAs align with CPUC expectations. The definitions, concepts, and tables are proposed as a “strawman” to clarify what is expected.

Business Plan metrics are intended to be high-level metrics that will allow the CPUC and other stakeholders to understand whether the intervention strategies put in place under the sector are working or the underlying tactics within the intervention need to be adjusted. These will include a combination of savings-metrics and strategy-metrics (defined below). All sector metrics should be placed within the context of the agreed upon targets for those metrics so that they provide information to the CPUC and stakeholders (i.e., data in context, rather than just data points). The following definitions and example tables are intended to help stakeholders understand what will be provided, as well as help PAs develop metrics.

Below we provide a series of definitions and tables that demonstrate the use of the definitions. To aid readers who are less familiar with the metrics component within the Business Plans, the end of the document includes an attachment with background information, (i.e., language from the guidance provided by the CPUC on May 2nd).

We welcome comments on this document. Please submit all comments to facilitator@caeccc.org by COB July 20th.

Definitions

Below we present a summary table of the definitions in this document. A more detailed explanation of the terms is provided following the summary table.

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Table 1. Summary of Metric Definitions for Business Plans

Term	Definition
Intervention strategies; Interventions	Within the Business Plans, the term intervention refers to the categories of tactics used within a sector or program (both will use multiple interventions). These intervention strategies can be at the customer level (e.g., providing rebates or technical assistance) or at the market level (e.g., building partnerships or training market actors). These are also referred to as “sector-specific strategies.”
Tactics	A tactic is an action carefully planned to achieve the intervention strategy. There are multiple tactics within an intervention.
Sector metrics	Sector metrics refer to specific items that will be measured at the sector level. These are not specific to one program.
Program metrics	Program metrics refer to specific items that will be measured at the program level.
Success criteria	Success criteria refer to specific targets or benchmarks that serve as the goals to achieve for each metric. Success criteria define (in specific terms) what successful attainment of the metrics looks like and the definition of “expected/good/bad”.
Savings-related metrics	Savings-related metrics include GWh Savings, MW Savings, Therm Savings at the sector level.
Strategy-related metrics	Strategy-related metrics allow the CPUC and stakeholders to monitor the sector at the strategy level (beyond just looking at savings).
Output metric	An output metric measures activities conducted within a sector. This includes the measurement of “what we do” and “who we reach.” “For example, an output metrics might be “number of workshops” or “number of participants.”
Outcome metric	An outcome metric is a metric that measures the effect of an intervention. For example, an outcome metric might be “changes in awareness or energy management tools.”
Common metrics	The term “common metrics” indicates that the PAs have the same (or similar) metrics, but they may have very different success criteria.
Statewide metrics	A statewide metric is a metric where all PAs work together to achieve one goal.
Baseline	The baseline is the minimum or starting point used to compare the metric when assessing that metric.

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Intervention and Tactics Terms

This section describes two key terms: interventions and tactics. We use tables in combination with the definitions to help the reader understand abstract definitions.

Intervention Strategies or Interventions: Within the Business Plans, the term intervention refers to the categories of tactics used within a sector or program. These intervention strategies can be at the customer level (e.g., providing rebates or technical assistance) or at the market level (e.g., building partnerships or training market actors). These are also referred to as “sector-specific strategies.” Statements of an intervention strategy should include both the strategy and the purpose for that strategy. For example, an intervention strategy could be “technical assistance (strategy) to facilitate project completion (purpose).”

Note that multiple tactics may reside within each intervention, and as such an intervention may have some existing tactics and some new tactics. It is also possible that some interventions would be wholly new. Interventions can adapt to specific market conditions, but do not change often. (See Figure 1.)

Figure 1. Example of two potential customer interventions with tactics

Intervention	Potential Tactics	Existing, New or Modified	Short, Mid, Long-term
Benchmarking to understand efficiency of homes or buildings	Identify ways to integrate ratings such as the Home Energy Score into existing PG&E offerings. For example, this could be an output from online Home Energy Check-ups. (SF)	[M]	[S]
	Improve existing multifamily property owners (2+ units) tools to support benchmarking, audits, and other assessments in compliance with AB 802. (MF)	[E]	[S]
	Develop new tools	[N]	[M/L]
Data access to provide customers with insights on their energy usage	Continue existing online energy management tools to provide customers with information about their energy usage. Provide energy rate education and options focusing on ways to save on customer bills.	[E]	[S]
	Promote existing third party vendors access to Stream my Data/Green Button Connect as a way to encourage innovation in customer tools and offerings. (SF).	[E]	[M]
	Develop new tools.	[N]	[M/L]
	Provide incentives to customers for software or devices to manage their energy usage.	[E]	[M]

Tactics: A tactic is an action carefully planned to achieve the intervention strategy. There are multiple tactics within an intervention. (See Figure 1.) For example, social marketing may be a specific tactic for

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

an intervention to engage customers. These should be denoted as existing, modified, or new (as of the writing of the Business Plan). The solutions presented in the Phase 2 documents¹ are generally aligned with more detailed tactics. The underlying tactics in which the program engages may change dramatically over time in an attempt to successfully intervene. Tactics will also specify time period, as follows (note that these time periods are not yet agreed to, but are provided here as a proposed alternative to what was presented in the checklist²):

- Short Term – up to 3 years (2017 – 2019)
- Mid Term – 3 to 6 years (2020 – 2022)
- Long Term – more than 6 years (2023 – 2024)

DRAFT

¹ The California Energy Efficiency Coordinating Committee (CAEECC) and its subcommittees were authorized by California Public Utilities Commission Decision 15-10-028. This new forum is the venue by which stakeholders can provide early input into the development of the Program Administrators' energy efficiency Business Plans. The PAs have provided information on the Business Plans to the CAEECC members in a phased approach. Stage 1 documents provided market assessment and gap analysis while Stage 2 documents described problem statements and solutions. See <http://www.caeccc.org/> for all documents.

² The Business Plan checklist indicates Near (one year), Mid (2-3 years), Long (4-5+ years).

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Example Sector Approach

A sector includes the combination of intervention strategies and tactics deployed within multiple programs. (See Table 2.)

Table 2. Example of potential different interventions by sector

	Non-technical Term	Intervention Strategy	Commercial	Residential	Agricultural	Industrial	Public	Cross-cutting		
								CC C&S	CC WE&T	CC ETP
Customer	Engage	Engagement		X	X	X	X			
		Engagement through Education	X						X	
	Help	Facilitation of Customer Understanding		X						
		Staffing Support					X			
		Data Services / Data Analytics		X						X
		Technical Assistance and Tools	X		X	X		X	X	
	Incentivize (\$ or not)	Training					X		X	
		Incentives – Rebates (\$)		X	X		X			
		Incentives – Loans		X						
	Maintain	Incentives – Non-monetary (behavioral)	X	X		X				
Savings Persistence		X								
Market		New Program Models	X	X		X	X			
		Develop Outreach Champions	X							
		Upstream and Midstream Activities	X	X						X
		Coordination						X		
		Partnerships			X				X	X
		Advocacy						X		
		Codes & Standards	X	X				X		

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Core Metric-Related Terms

Sector Metrics: A metric is a term that refers to the measurement of something. Sector metrics refer to specific items that will be measured at the sector level (as compared to Program Metrics, which will be measured at the program level). The metrics will be unambiguous and be appropriate measures of the specific sector intervention strategy (not the tactics associated with the strategy). The metrics will be measurable at a reasonable cost. Metrics will also be a mix of output and outcomes (See below for more information on output and outcome metrics)

Note that a metric is valueless, that is, the wording of the metric itself does not specify the target. As such, PAs should be able to have the same metric, with different targets. However, a directionality (e.g., increase in participation) and time frame for each metric is expected and will be defined by the associated success criteria (see Success Criteria below). The example metric table at the end of this document provides an example to show how metrics and success criteria relate to each other.

There are multiple types of sector metrics, including savings-related sector metrics and strategy-related sector metrics. These are defined below.

For purposes of this Business Plan, the CPUC's expectations will be met by the combination of the metric and success criteria.

Success Criteria: Success criteria refer to specific targets or benchmarks that serve as the goals to achieve for each metric. Success criteria define (in specific terms) what successful attainment of the metrics looks like and the definition of "expected/good/bad". These can be thought of as "performance criteria" and may be expressed in terms of conservative, medium and high targets. The success criteria are ideally defined by a review of past performance among similar programs, or established through the literature and past performance. All criteria will be realistic, achievable, and time bound. Success criteria will also specify the time frame for assessment as 1 year, 3 years, 6 years, etc.³ The assessment year means that the assessment information will be available by the end of that year (e.g., an assessment at 3 years means that information is available at the end of the third year). Success criteria may also sometimes be referred to as targets.

Program Metrics: The specific items that will be measured at the program level and are not included in the Business Plan. The CPUC has distinguished between sector-level metrics for the Business Plan, and program-level metrics for the Implementation Plan.

³ Note that the CPUC recommended short and long-term success criteria. We are recommending specifying the assessment time frame, which incorporates this concept (while not confusing with the time frames for strategies and tactics). Longer-term strategies would have longer assessment time frames.

Metrics – Savings and Strategy

“Savings-Related” Sector Metrics: In the document provided to the PAs by the CPUC entitled “Energy Efficiency Rolling Portfolio Business Plan Guidance”⁴ (provided on May 2, 2016), the CPUC indicated that the PAs should provide the following metrics at the sector level:

- GWh Savings
- MW Savings
- Therm Savings

For ease of discussion, we refer to these required metrics as **“Savings-Related Metrics.”**

“Strategy-Related” Sector Metrics: These are metrics that allow the CPUC and stakeholders to monitor the sector at the strategy level (beyond just looking at savings). The CPUC has also specified that they want additional metrics beyond these savings-related metrics. Per the May 2nd guidance, example metrics might include:

- “Type and number of customers who will be reached in the sector” (over time frame)
- Number of customers in geographically targeted areas (i.e., “where these customers are located”)

The metrics will reflect the Intervention Strategies (and the objective of the Intervention Strategies) and will allow the CPUC and stakeholders to understand (at a high-level) whether the intervention strategies are working as intended or should be revisited. These will serve as a high-level management tool.

⁴ This guidance is located here: <http://www.caeec.org/#!/business-plan-guidance/dzljus>

Table 3. Example of Savings-related “Metrics” and “Success Criteria” (examples only)

Intervention		Assessment		Baseline and Success Criteria				
Strategy	Metric	Metric Source	Time Frame	Baseline	Baseline Reference	Conservative	Mid	High
All Interventions	GWh	Ex Ante Gross Impacts	Annually	Annual Gross Market Potential ^a (new each year)	2013 Potential and Goals Study (need correct reference)	Market Potential Value	Low + 2%	Low + 7%
	MW	Ex Ante Gross Impacts	Annually	Annual Gross Market Potential (new each year)	2013 Potential and Goals Study (need correct reference)	Market Potential Value	Low + 2%	Low + 7%
	Million Therms	Ex Ante Gross Impacts	Annually	Annual Gross Market Potential (new each year)	2013 Potential and Goals Study (need correct reference)	Market Potential Value	Low + 2%	Low + 7%

Note: Savings will be garnered through a portfolio that has a cost effectiveness value greater than 1.0. See Section X for this sector’s budget information.

^a Annual savings values are provided in Table X.

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Table 4. Example of Strategy-related “Metrics” and “Success Criteria” (examples only)

Intervention		Assessment		Baseline and Success Criteria				
Strategy	Metric	Metric Source	Time Frame	Baseline	Baseline Reference	Conservative	Mid	High
Tools that provide information or ratings to help customers understand the energy efficiency of various products	Percentage of customers using tool	PA Tool and Customer Databases	Year 2 [‡]	2.4%	2015 Databases	4%	6%	10%
			Year 4	TBD(a)	Based on Year 2 data	Baseline + 2%	Baseline + 7%	Baseline + 10%
			Year 6	TBD(a)	Based on Year 4 data	Baseline + 2%	Baseline + 7%	Baseline + 10%
	Percentage of customers who know they have information available (from PA) about energy efficient products (or home ratings)	General population survey	Year 3	6%	Current EM&V Report (with appropriate reference to list below, e.g., CPUC p12)	8%	12%	16%
			Year 6	TBD(c)	Based on 3-year survey	Baseline + 2%	Baseline + 4%	Baseline + 8%
	Strategic partnerships with agricultural service providers to increase awareness of available energy efficiency programs and offerings	Number and type of partnerships	PA annual report	Year 2	1, University	Program data	1	2
Year 4				TBD	PA Annual Report for Year 3	3	4	4
Awareness of EE programs among agricultural customers		General agricultural population survey	Year 1	TBD (c), but low	Navigant 2013. Exec Summary specifies “low”. Expect to perform additional survey to determine specific percent.	Baseline + 2%	Baseline + 7%	Baseline + 10%
			Year 4	TBD (c)	Based on survey	Baseline + 2%	Baseline + 7%	Baseline + 10%
(a) Baseline is from PA data and would be able to be determined before finalization of the Business Plan (b) Baseline is from a study that is currently in progress (c) Baseline would need to come from a study that would need to occur/be funded in the near future [‡] The PA will track this and review more frequently, but the success criteria targets are for the time frame shown above.								

A reference list would be somewhere in the Business Plan and include *all* references including the baseline references in Table 4.

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Metrics - Outputs and Outcomes

Metrics can be related to the outputs of a program (or suite of programs) or the outcomes of a program or sector. Having metrics for outputs can help understand the results of outcomes, but are not always required. For example, as long as a program (or suites of programs) meets the expected outcomes, capturing and reviewing many outputs may be added burden to those implementing or overseeing a program.

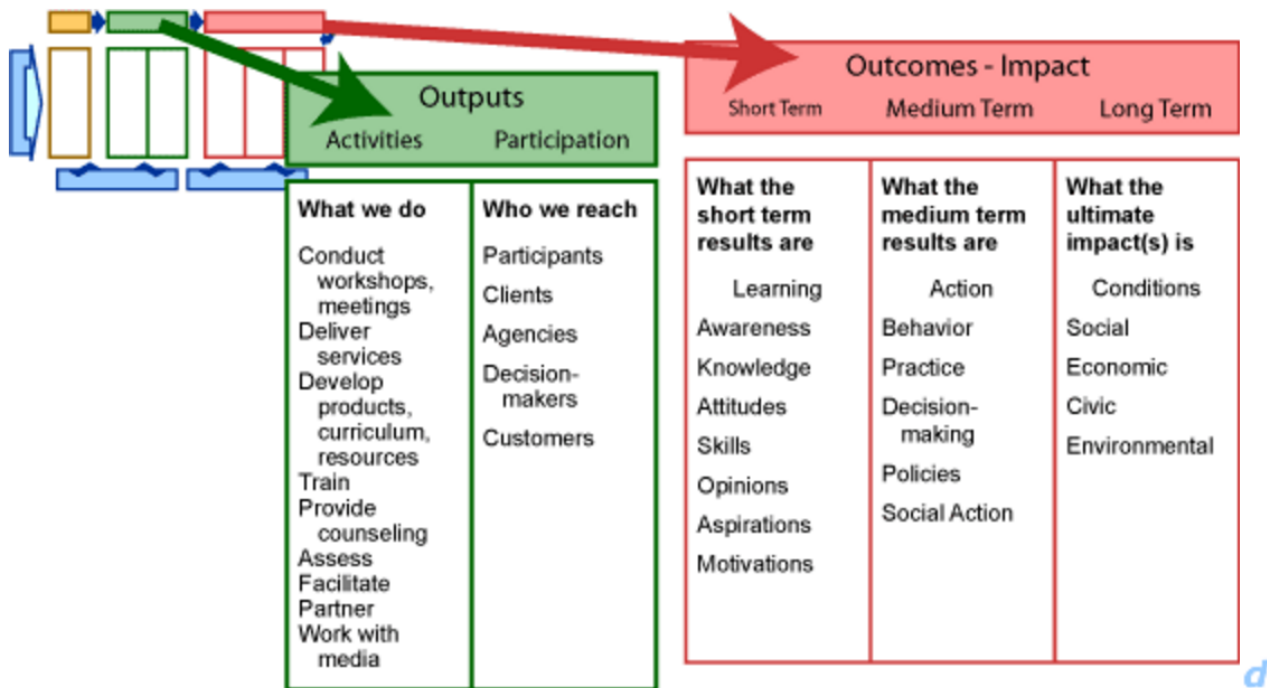
Output Metrics: An output metric measures activities conducted by a sector. This includes the measurement of “what we do” and “who we reach.” “For example, an output metrics might be “number of workshops” or “number of participants.”

Outcome Metrics: An outcome metric is a metric that measures the effect of an intervention. For example, an outcome metric might be “changes in awareness or energy management tools.”

The figure below, provides an example of the difference between outputs and outcomes.

Figure 2. Example of Outputs versus Outcomes

Understanding the difference between outputs and outcomes is important. **Outputs** relate to “what we do.” **Outcomes** refer to “what difference is there.”



Source: <http://www.uwex.edu>

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

Additional Metric-Related Terms

Common Metrics: The term “common metrics” indicates that the PAs have the same (or similar) metrics, but they may have very different success criteria. An example of a common metric is sector participation, which would have different success criteria for each PA.

Statewide Metrics: A metric where all PAs work together to achieve one goal. The term “Statewide metrics” indicates a metric for which the PAs are working together to achieve the same success criteria. An example statewide metric may be statewide partnerships with manufacturers.

Baseline: The baseline is the minimum or starting point used to compare the metric when assessing that metric. Each metric will have a baseline against which the success criteria will be judged. The baseline information may be based on a variety of sources such as a previous evaluation, PA customer or program tracking data, or sales data. Each baseline will include the reference for the value. If there is no known baseline at the time of the Business Plan, the PA will determine a baseline within one year of filing the Business Plan and will provide this information to the CPUC and other stakeholders. Baselines that are TBD will indicate whether: (1) the baseline is from PA data and would be able to be determined before finalization of the Business Plan,⁵ (2) the baseline is from a study that is currently in progress, or (3) the baseline would need to come from a study that would need to occur/be funded in the near future.

⁵ Note that in some cases, the baseline *could* be determined now, but the PAs do not want to invest the extensive resources to do the analysis unless it is an accepted metric.

Attachment: Background Commission Guidance Regarding Business Plans

Below are excerpts from the May 2, 2016 Commission Guidance document⁶. Included directly below is a short description of the business plans and specific guidance on metrics. Information is not in italics is copied verbatim. The full decision (D.15-10-028) is here:

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M155/K511/155511942.pdf>

The Rolling Portfolio process adopted in Decision 15-10-028 directs Program Administrators (PAs) to submit high level documents (**Business Plans**) that describe how PAs will achieve portfolio goals. Initial Business Plans are scheduled to be filed in September 2016. PAs may submit updated Business Plans at any time; additionally, the Plans must be revised in response to the following “trigger” events:

- An inability to meet savings goals; stay within the budget parameters of the most recent and prior Business Plan; or meet Commission established cost effectiveness metrics (excluding Codes and Standards and “spillover” adjustments);
- The filing of a new application as a result of a policy track decision in the proceeding; or
- The imminent onset of the final year of funding.⁷

The Commission also conceived of **Implementation Plans** that would be uploaded to a publicly accessible website to provide detailed descriptions of the interventions that PAs would pursue to achieve the high level efforts described in the Business Plans.

D. 15-10-028 described and provided a template for the Business Plans,⁸ and it also delegated to Commission staff responsibility to provide additional guidance on Business Plan contents. In doing so, the Commission emphasized a desire to balance the need to receive useful information from PAs with an aim to keep Business Plans “compact and focused, and to reduce administrative costs.”⁹ This document provides staff’s additional guidance consistent with the Commission’s request.

The numbered information below is one of four specific pieces of guidance.

3. Portfolio and sector level metrics for regulatory oversight (GWh, MW, therms, cost-effectiveness and other parameters where applicable), including performance metrics for non-resource programs. –
 - a. Implementation Plans and Annual Budget Advice Letters disaggregate to the program and measure level. Therefore, Business Plans should contain quantitative information in tables, graphics and narrative, to support predictions or conclusions at a level that makes sense for the portfolio and/or sector overall. For example, NTG cannot, nor should not, be aggregated to the sector level; nor should other parameters like EUL, rapidly-changing Tech Types, and installation counts.
 - b. The Business Plans should make liberal, accurate, and well-reasoned use of data sources such as:
 - Past evaluation report data, including recommendations
 - Explanations of how cost effectiveness and other parameters have been considered and calculated,

⁶ This guidance is located here: <http://www.caeec.org/#!/business-plan-guidance/dzlus>

⁷ See D. 15-10-028, pp 56-7

⁸ Appendix 3 of D. 15-10-028 provides the draft Business Plan template.

⁹ See D. 15-10-028, pg. 57

This document presents examples for potential interventions and metrics for the purposes of conceptually understanding the proposed structure. Nothing is final. This information is to ensure a common understanding of what should be in the Business Plan.

- Justification for how the overall budget forecast is derived and accounted for in the near-, mid- and long-term.
- c. In addition to sector and program information, the plans will identify how their administrative budgets were derived, based on findings from the UAFCB Auditors Report recommendations and LAJ Ruling for comments on the November 19, 2015 Energy Efficiency Accounting Workshop.¹⁰
- d. Commission direction in D. 15-10-028 relieved program administrators of the program performance metrics (PPM) and market transformation indicators (MTI) established by resolution E-4385. However, in its discussion of metrics related to business plans, the Commission clearly states that program administrators “must establish up-front expectations for their activities” and that “business plans shall contain sector-level metrics”. These metrics should be “appropriate benchmarks against which to measure program/strategy/intervention performance and should be designed to improve the chances of the metric and associated perspective of measuring it over time.”¹¹

A key aspect of this Commission direction is the term “benchmarking”, which links to prior ratepayer-funded research and how program administrators will incorporate what they already know into the information presented in the Business Plans. Benchmarking is a logical component of a Business Plan; it allows measurement against industry standards and practices. For program administrators, benchmarking provides a pathway to establishing clear (and, where appropriate, directional) baselines and related metrics for their specific programmatic efforts against which they can reliably measure actual program performance.

These baselines and metrics are to be informed by what the program administrators already know about each sector, which would be included in the Business Plans. The Business Plans should clearly identify the sector-level metrics that are proposed for regulatory oversight associated with this recommendation, versus the more detailed metrics related to strategic plan and/or legislative mandates discussed in recommendation #4 below that will not be formally reported by program administrators.

Additional guidance relevant to metrics from D.15.10.028

“PAs will have to tie their metrics back to the Strategic Plan. As with so much that we do here, there is going to be an element of trial and error in determining the right type of, number of, and level of abstraction for metrics.” (p.54)

¹⁰ <http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=156129077>

¹¹ See D. 15-10-028 at p. 53